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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,387	12/31/2001	Takeshi Yokoe	P/289-168	2083
32172	7590	10/19/2005	EXAMINER	
DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) 41 ST FL. NEW YORK, NY 10036-2714			PARK, CHAN S	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/040,387

Applicant(s)

YOKOE, TAKESHI

Examiner

CHAN S. PARK

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims are objected to because of the following informalities:
Claim 6, line 3, "a data block" should be -- said data block --;
Claim 6, line 5, "memory" should be -- a memory --;
Claim 7, line 5, "the display data" should be -- display data --;
Claim 11, line 2, "a data block" should be -- said data block --;
Claim 13, line 3, "a data block" should be -- said data block --;
Claim 16, line 3, "a data block" should be -- said data block --; and
Claim 19, line 3, "a data block" should be -- said data block --.
Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It recites "said second interface being assigned *higher priority* and said third interface being assigned *lower priority*". It is confusing as to with respect to which interface said second and third interfaces assigned higher or lower priority. In other

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words, is the second interface assigned higher priority than the first interface or the third interface?

Furthermore, it recites "a print request" twice. It is unclear as to which of said three print data the print request is referring to. Also, there is insufficient antecedent basis for this limitation with respect to the second "print request".

3. With respect to claim 8, arguments analogous to those presented for claim 15, are applicable.

4. Claim 19 recites the limitation "said third print data". There is insufficient antecedent basis for this limitation in the claim. Perhaps, claim 18 is a dependent claim of claim 15, instead of claim 9. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Gusmano et al. U.S. Patent No. 5,970,222 (hereinafter Gusmano).

5. With respect to claim 9, Gusmano discloses printer controller comprising:

first and second interfaces (figs. 3 & 4) respectively connected to first and second print data sources (interfaces connecting the scanner and the fax in fig. 3), said first and second print data sources respectively producing first and second print data, each of the

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first and second print data comprising a plurality of data blocks (segments or packets) each containing a plurality of pages (Abstract); and

a control module for receiving the first print data from said first interface if said first print data source is requesting a print of said first print data for printing on a printer (copy command of the scanned data), and receiving the second print data from said second interface for printing on said printer if said second print data source is requesting a print of said second print data (printing of the facsimile data transmitted to the printer). Also, read col. 8, lines 19-30.

6. With respect to claim 11, Gusmano discloses the printer controller of claim 9, further comprising at least one buffer (packet buffer) for storing said data block of one of said first and second print data (col. 6, lines 1-14).

7. With respect to claim 12, Gusmano discloses the printer controller of claim 9, further comprising first and second buffers connected to the first and second interfaces, respectively, said first buffer (fig. 4) storing a plurality of data blocks of said first print data, and said second buffer (fig. 4) storing a plurality of data blocks of said second print data (col. 6, lines 14-28).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gusmano in view of Osada et al. U.S. Patent No. 6,600,569 (hereinafter Osada).

8. With respect to claim 2, Gusmano teaches a printing method for first and second print data sources, said first and second data sources respectively producing first and second print data (col. 8, lines 31-47 & col. 9, lines 45-50), each of the print data being divided into a plurality of data blocks each containing multiple pages (Abstract), comprising the steps of:

a) printing a data block (first job segment) of said first print data when said first print data source is requesting a print of said first print data (step (a) of Abstract);

b) repeating step (a) (step (b) of Abstract); and

c) printing a data block of said second print data if said second print data source is requesting a print of said second print data (printing of another job in the same way).

Gusmano, however, does not teach if said second print data stops repeating of step (a).

Osada, the same field of endeavor of network printing system, teaches a printing method for processing a plurality of print jobs, wherein each job includes priority information as to set which job should be printed first (col. 24, line 66 – col. 25, line 15).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the priority setting method of Osada with the printing system of Gusmano.

The suggestion/motivation for doing so would have been to manage the plurality of print jobs by the printing system.

Therefore, it would have been obvious to combine Gusmano with Osada to obtain the invention as specified in claim 2.

9. With respect to claim 3, Gusmano teaches the printing method, wherein a number of said multiple pages contained in each of said data blocks of said first and second print data are variable (col. 9, line 51 – col. 10, line 12).

10. With respect to claim 4, Gusmano teaches the printing method, further comprising the step of repeating step (a) or (c) depending on whether said first print data source is requesting a print of said first print data or said second print data source is requesting a print of said second print data (requesting N copies to be printed in the Abstract). Further, Osada teaches the method for requesting a print of the first and second jobs (col. 24, line 66 – col. 25, line 15).

11. With respect to claim 5, Gusmano teaches the printing method, wherein each of said first and second print data contains a command signal (requesting N copies), and wherein step (b) further comprises the step of detecting the command signal in said first print data and repeating step (a) if the command signal is detect, and wherein step (c) further comprises the step of detecting the command signal in said second print data and repeating step (c) if the command signal is detected. Further, Osada teaches the

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method of including priority command in each of the print jobs (col. 24, line 66 – col. 25, line 15).

12. With respect to claim 6, Osada teaches the printing method, wherein printing step of the first print job comprises the steps of:

a1) generating resource data from a block from the data block of said first print data (col. 16, lines 33-44 & col. 8, lines 31-47 of Gusmano);

a2) storing the resource data in memory (rendering buffer);

a3) converting each page data to display data using the resource data stored in said memory (col. 16, lines 45-60); and

a4) clearing the resource data when the display data of said data block is printed (col. 16, lines 45-60 of Osada & abstract and col. 6, lines 15-28 of Gusmano).

As it is well known in the art, the rasterization of the print data taught by Osada must be done in the printing process.

13. With respect to claim 7, Gusmano teaches the printing method, wherein each of said first and second print data contains configuration data for determining a plurality of print conditions, further comprising the steps of:

storing the configuration data (PDL & N copies commands) in a buffer; and

repeatedly using the stored configuration data when a display data of said data block is printed by either step (a) or step (c) (col. 8, lines 31-47).

Also, refer to fig. 9 of Osada.

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14. With respect to claim 1, as noted above in claims 2 and 6, the combination of Gusmano and Osada teaches a printing method comprising the steps of:

dividing print data of a first print data source into a plurality of data blocks (segments or packets) each containing a plurality of pages (abstract of Gusmano);

generating resource data from each data block and converting the page print data of each block to display data by using the resource data (col. 16, lines 33-44 of Osada & col. 8, lines 31-47 of Gusmano);

printing display data; and

clearing the resource data and granting permission to a print request from a second print data source (col. 24, line 66 – col. 25, line 15) when the display data of the first print data source has been printed (col. 16, lines 45-60 of Osada & abstract and col. 6, lines 15-28 of Gusmano).

As it is well known in the art, the rasterization of the print data taught by Osada must be done in the printing process.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the converter and the priority setting method of Osada into the printing system of Gusmano.

The suggestion/motivation for doing so would have been to manage the plurality of print jobs by the printing system.

15. With respect to claim 15, Gusmano discloses a printer controller comprising:

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first, second and third interfaces (figs. 3 & 4) respectively connected to first, second and third print data sources, said first, second and third print data sources respectively producing first, second and third print data, each of the print data comprising a plurality of data blocks (segments or packets) each containing a plurality of pages (abstract); and

a control module for receiving a data block of said first print data from the first interface for printing on a printer, receiving a data block of said second print data from the second interface if a print request is received therefrom after printing has been performed on the data block of the first print data for processing on said printer, regardless of whether said third print data source is requesting a print of said third print data, and receiving a data block of the third print data from the third interface if a print request is received therefrom after printing has been performed on the data block of the second print data. It is noted that printing of print data from a host computer, a facsimile machine and a scanner is performed by the printing system of Gusmano (col. 9, lines 43-50). Hence, one print job after another can be performed in the system.

Gusmano, however, does not teach if said second print data stops the printing of the first print data.

Osada, the same field of endeavor of network printing system, teaches a printing method for processing a plurality of print jobs, wherein each job includes priority information as to set which job should be printed first (col. 24, line 66 – col. 25, line 15).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the priority setting method of Osada with the printing system of Gusmano.

The suggestion/motivation for doing so would have been to manage the plurality of print jobs by the printing system.

Therefore, it would have been obvious to combine Gusmano with Osada to obtain the invention as specified in claim 15.

16. With respect to claim 16, Osada discloses the printer controller, further comprising a converter for converting print data to display data, wherein said control module directs said converter to convert said data block of the first print data to display data and supplies the display data to the printer (col. 16, lines 45-60). As it is well known in the art, the rasterization of the print data taught by Osada must be done in the printing process. Also, read col. 8, lines 31-47 of Gusmano.

17. With respect to claim 17, Gusmano discloses the printer controller, further comprising at least one buffer (packet buffer) for storing said data block of one of said first and second print data (col. 6, lines 1-14).

18. With respect to claim 18, Gusmano discloses the printer controller of claim 9, further comprising first, second and third buffers connected to the first, second and third interfaces, respectively, said first buffer (fig. 4) storing a plurality of data blocks of said first print data, said second buffer (fig. 4) storing a plurality of data blocks of said second print data, and said third buffer (fig. 4) storing a plurality of data blocks of said third print data (col. 6, lines 14-28).

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19. With respect to claim 19, Osada teaches the printing method, wherein printing step of the first print job comprises the steps of:

a1) generating resource data from said block from the data block of said first print data (col. 16, lines 33-44 & col. 8, lines 31-47 of Gusmano);

a2) storing the resource data in memory (rendering buffer);

a3) converting each page data to display data using the resource data stored in said memory (col. 16, lines 45-60); and

a4) clearing the resource data when the display data of said data block is printed (col. 16, lines 45-60 of Osada & abstract and col. 6, lines 15-28 of Gusmano).

As it is well known in the art, the rasterization of the print data taught by Osada must be done in the printing process.

20. With respect to claim 8, arguments analogous to those presented for claim 15, are applicable.

Claims 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gusmano as applied to claim 9 above, and further in view of Osada.

21. With respect to claim 10, Gusmano discloses the printer controller of claim 9, but it does not disclose expressly the converter.

Osada, as set forth above, discloses the printer controller, comprising a converter for converting print data to display data, wherein said control module directs said

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converter to convert said data block of the first print data to display data and supplies the display data to the printer (col. 16, lines 45-60).

As it is well known in the art, the rasterization of the print data taught by Osada must be done in the printing process. Also, read col. 8, lines 31-47 of Gusmano.

Thus, it would have been obvious to combine the converter of Osada with the printing system of Gusmano to obtain the invention as specified in claim 10.

22. With respect to claim 13, as set forth above, the combination of Gusmano and Osada discloses the control module has the functions of:

a1) generating resource data from a block from the data block of said first print data (col. 16, lines 33-44 of Osada & col. 8, lines 31-47 of Gusmano);

a2) storing the resource data in memory (rendering buffer);

a3) converting each page data to display data using the resource data stored in said memory (col. 16, lines 45-60 of Osada); and

a4) clearing the resource data when the display data of said data block is printed (col. 16, lines 45-60 of Osada & abstract and col. 6, lines 15-28 of Gusmano).

As it is well known in the art, the rasterization of the print data taught by Osada must be done in the printing process.

Thus, it would have been obvious to combine the converter of Osada with the printing system of Gusmano to obtain the invention as specified in claim 13.

23. With respect to claim 14, as set forth above, the combination of Gusmano and Osada discloses the printer controller, further comprising a buffer, and wherein each of

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said first and second print data contains configuration data for determining a plurality of print conditions, further comprising the steps of:

storing the configuration data (PDL & N copies commands of Gusmano) in a buffer; and

repeatedly using the stored configuration data when a display data of said data block is printed by either step (a) or step (c) (col. 8, lines 31-47 of Gusmano).

Also, refer to fig. 9 of Osada.

Thus, it would have been obvious to combine Osada with Gusmano to obtain the invention as specified in claim 14.

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Contact Information


24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S. PARK whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chan S. Park
Examiner
Art Unit 2622

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October 12, 2005


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